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Denver Post

Risk of drilling for natural gas is too high

Despite principles that show fracking can't endanger aquifers, I remain skeptical
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By Allen Best
Writers on the Range

Like Josh Fox, the maker of the semi-documentary film "Gasland," I am an owner of natural gas in the Marcellus shale of Pennsylvania. My newfound wealth was reported to me one evening last year as I prepared to go to a Denver Nuggets game.

A third or fourth cousin from Kansas called to tell me about our common ancestor, Solomon Hinerman. He had farmed briefly in Pennsylvania's Green County more than a century ago, and a gas company — I believe it was Chesapeake Energy — wanted to lease our mineral rights.

When "Gasland" premiered at Mountainfilm in Telluride in 2010, I had already been wrestling with natural gas issues in Colorado. Driving the once-pastoral county road along Piceance Creek, between Rifle and Meeker, I jostled with trucks as if on a busy street in Denver. Back-country roads lead to industrial sites scraped from the piñon-and-juniper forests. From 35,000 feet, the drilling pads look like exurban housing lots. There's a bunch of them between Salt Lake City and Denver.

Hydraulic fracturing has been a pivotal issue. A professor at the Colorado School of Mines told me that fracking itself posed no threat to drinking water. Rather, the issue was whether the well bores had been encased properly with concrete. An on-the-ground source, no fan of the gas companies, said surface contamination was a far greater environmental threat. Companies needed to be monitored, to ensure best practices. Trust but verify, Ronald Reagan once advised. But the federal government has few such eyes for public lands, and neither do state and local governments.

Solomon Hinerman's heirs, 32 and counting, have been a microcosm of the broad national conversation about drilling. One descendent, in Fort Worth, wanted us to just sign the danged lease. My sister in Idaho fretted about environmental impacts. A second cousin in Salt Lake City even called the current surface owner of the land that our great-grandfather Solomon had once plowed, to get the current farmer's perspective.

With what I hoped was Solomon-like wisdom, I argued that all energy extraction has impacts. Privately, I counseled my siblings that we could invest our earnings in energy efficiency, to reduce our own demand for gas, or donate to environmental watchdogs in Pennsylvania.

In "Gasland," Fox also discovers his inheritance — and forsakes it to instead set out on a journey to document impacts at Pavilion, Wyo., the Piceance Basin of Colorado, and the Wattenberg field northeast of Denver. In that latter case, a resident uses a lighter to create a fire from a kitchen faucet.

That was a galvanizing scene, and even when "Gasland" was shown in Telluride, I knew Fox had shaved crucial corners from the truth. The Denver Post many months before had reported on the case of tap-water contamination near Fort Lupton. Natural gas can enter into domestic water supplies from natural sources, what the Colorado Oil and Gas Commission called "biogenic sources." That appeared to be the case. The drilling industry here was just an innocent bystander.

"But I could see it with my own eyes," said somebody in Telluride when I tried to explain. Such is the power of film.

Fox wasn't entirely wrong, either. The onus is on the industry. Industry leaders understand this. Robert Kennedy Jr., former U.S. Sen. Tim Wirth, and others from the environmental movement have been conspicuous at the Colorado Oil and Gas Association's annual conference for the last three years. You can be prosperous, they have said, but you must learn to like regulation.

Wirth has been a friend of the gas industry for decades, and for just as long he has been adamant about the risk of global warming. He sees natural gas as a bridge from coal to carbon-free energy.

Gas drillers mostly hate anybody looking over their shoulders. That's understandable. But the industry often has seemed stubborn and shrill. Consider what happened after Colorado adopted regulations governing drilling. Enactment of those regulations coincided almost perfectly with the Great Recession. Gas prices of nearly \$14 per million British thermal units, which had justified drilling wells 13,000 feet deep in difficult formations such as the upper Piceance Basin between Rifle and Rangely, tumbled to \$1.95 per million BTU.

Shockingly, in red-ribbed regions such as Grand Junction, the state regulations were blamed, not the free market that conservatives trumpet as the ultimate wisdom.

If we shift electrical production and our delivery fleets to natural gas, we'll be poking holes into the ground hither and thither across the Rocky Mountain states for years to come. Getting it right, as best we can, is crucial.

Despite the geological principles why fracking can't endanger potable water aquifers, I remain skeptical. Several years ago, a hydrogeologist retained by Castle Rock was asked by city officials how much water remained in the town's diminishing aquifers. He refused to venture a guess. "It's dark down there," he said.

Drilling technology is a marvel beyond the technique of fracking. Yet the public remains unconvinced. Even as the drilling rigs arrived in the exurbs of conservative Colorado Springs, the Republican mantra of drill-baby-drill has no patriotic fervor when the drill pad is in your backyard.

Another experience informs my skepticism. In the 1980s, cleanup of pollution from the old zinc-and-lead mine near Vail was to begin. Water pouring over the exposed faces of rock within the abandoned mine at Gilman was picking up manganese, arsenic and other contaminants that then flowed into the Eagle River. Geologists and engineers at this Superfund site proposed to seal the mine to prevent polluted water from escaping.

"How do you know it will work?," asked I, the innocent reporter. Because, said the experts, we think the geology will drive the water deep underground and under the Rocky Mountains.

The experts were wrong. The mine's adits were sealed, but the Eagle River soon turned Kool-Aid orange, the bugs and fish gone. At the Beaver Creek ski area, snow made with water drawn from the river had a Broncos color scheme.

For all that he got wrong, Josh Fox got the big story right. There has to be accountability, and there must be trust. Right now, the evidence for both is thin. Which is why his film, despite its flaws, resonated with many people.

That's also why Mitt Romney, in his pandering speech in Grand Junction this month, had it wrong. Clean water is a broad, national concern — as Congress specified in the landmark federal legislation of that name 40 years ago.

As for my family's mineral rights in Pennsylvania, I've heard nothing in months. Guess a vacation in Barbados — or a washing machine at my house — will have to wait.

Allen Best of Aurora publishes an e-zine called Mountain Town News. He has been a journalist in Colorado for 35 years.

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